

A STUDY ON THE FLEA BEETLE GENUS *EUPHITREA* BALY FROM
CHINA, WITH THE DESCRIPTION OF FIVE NEW SPECIES
(COLEOPTERA: CHRYSOMELIDAE: ALTICINAE)

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Abstract.—Twenty-seven species of *Euphitrea* Baly from China are studied. Among them, *Euphitrea antennata* Zhang and Yang, *E. cheni* Zhang and Yang, *E. hainana* Zhang and Yang, *E. mandibula* Wang and Zhang and *E. omeia* Zhang and Yang are described as new to science. *Euphitrea gressitti* (Chûjô) is transferred from the genus *Neorthaea* Maulik (n. comb.). A key to the known Chinese species is given. The habitus of the five new species, and the antennae, aedeagus, spermatheca, vaginal palpi and tignum of most species are illustrated.

Key Words: Coleoptera, Chrysomelidae, Alticinae, *Euphitrea*

The genus *Euphitrea* was proposed by Baly in 1875, with the type species *Euphitrea wallacei* Baly from Sumatra. At present, 42 world species are known, all distributed in the Oriental Region. Of these, 27 species occur in China, 17 of which are endemic. Studies on *Euphitrea* have been published by Maulik (1926), Chen (1933, 1934), Gressitt and Kimoto (1963), Scherer (1969), Wang (1992, 1996), and Medvedev (1998). However, the Chinese species have not been studied thoroughly. In this paper, we treat the 27 known Chinese species, five of which are described as new. Of the 22 described species, we have studied the types of 15 species that are deposited in IZAS and BMNH. Four of the other seven species, *E. flavipes* (Chen), *E. laboissieri* (Chen), *E. nigra* (Chen) and *E. piceicollis* (Chen) were proposed by the late Prof.

Chen Sicien, and we have studied specimens identified by Prof. Chen that are deposited in IZAS. Although we haven't had the opportunity to check the types, we believe the identification of these species are correct. We did not have the chance to check specimens of *E. chinensis* Medvedev, *E. gressitti* (Chûjô) and *E. taiwana* Kimoto. Identification of these three are based on the original descriptions which have good illustrations of the aedeagus and other structures.

All specimens examined in this study, including type of the five new species, are deposited in the Insect Collection of Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZAS) and The Natural History Museum, London, U.K. (BMNH).

Four of the new species were recognized by the late Prof. Chen Sicien, and

we publish them to commemorate his centennial birthday.

Genus *Euphitrea* Baly

Euphitrea Baly 1875: 27 (type species: *Euphitrea wallacei* Baly 1875, by original designation); Weise 1922: 125; Brant 1923: 143; Scherer 1969: 222.

Orthaea Jacoby 1889: 201 (type species: *Orthaea viridipennis* Jacoby 1889, by original designation) (nec Dallas 1852); Maulik 1926: 259 (synonymized).

Euphymasia Jacoby 1899: 310 (type species: *Euphymasia dohrni* Jacoby 1899, by original designation); Maulik 1926: 177 (synonymized).

Neorthaea Maulik 1926: 176, 259. (New name for *Orthaea* Jacoby); Chen 1933: 88; Chujo 1935: 355; Gressitt and Kimoto 1963: 745, 792; Kimoto 1965: 428; Scherer 1969: 222.

Description.—Body rounded, strongly convex (Fig. 1). Vertex strongly and longitudinally raised in the middle and excavated on either side above eye by a deep furrow (Fig. 42). Frontal tubercles not prominent, somewhat oblique, interantennal carina obsolete. Antenna moderately long, almost reaching middle of elytra; three basal segments generally without pubescence, others with pubescence and slightly thickened apically (Fig. 104). Pronotum broader than long, somewhat convex, each side with margin, anterolateral corner with a distinct setigerous pore (Fig. 31). Scutellum small, triangular, with apex pointed. Elytra broader at base than pronotum, with confused and dense punctures; epipleuron broad, somewhat narrowed posteriorly, with transverse wrinkles on

surface. Underside with sparse punctures and pubescence, anterior coxal cavities closed behind; prosternum channeled along midline; mesosternum short, erect, hidden by apex of metasternum; metasternum extending to mesocoxae; posterior femur moderately thickened; tibiae broadened towards apex, flattened and somewhat sinuate on outer edge; claws appendiculate; abdominal sternite of male concave apically, median part trilobed, of female only slightly rounded.

Diagnosis.—This genus can be distinguished from others of Alticinae by following characters: body rounded, strongly convex. Vertex strongly and longitudinally raised in the middle and excavated on either side above the eye by a deep furrow.

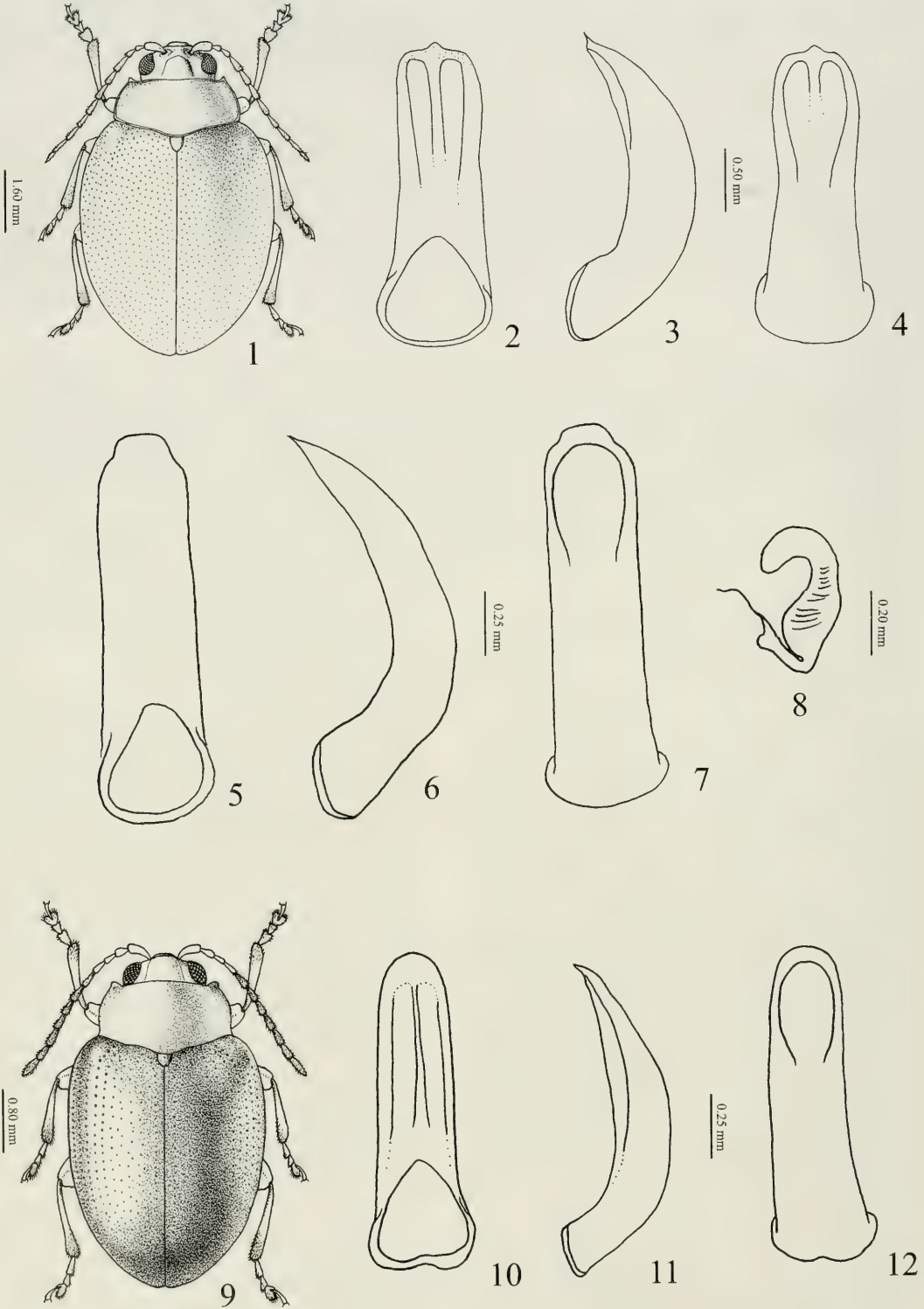
Distribution.—Oriental Region.

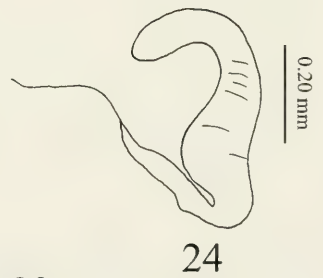
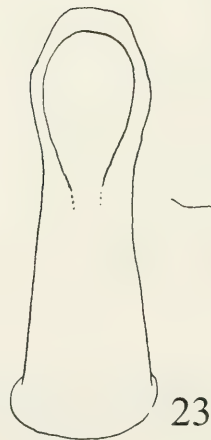
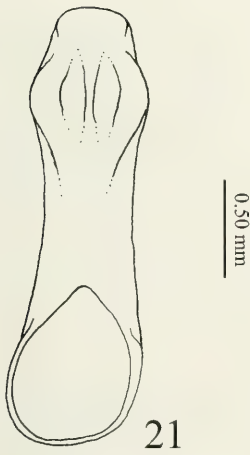
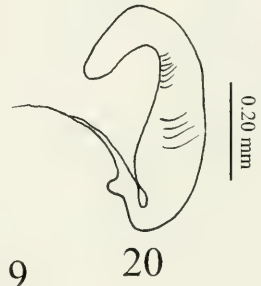
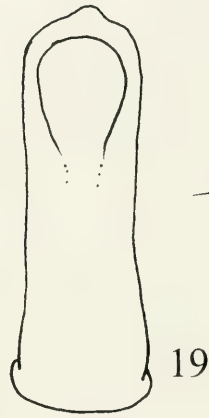
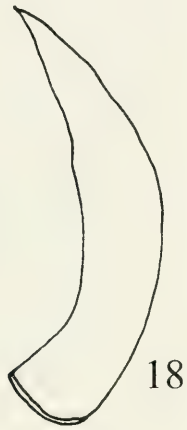
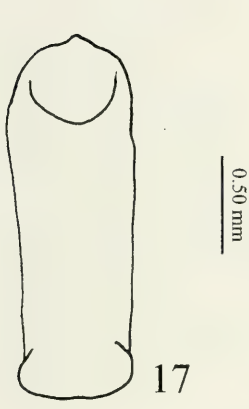
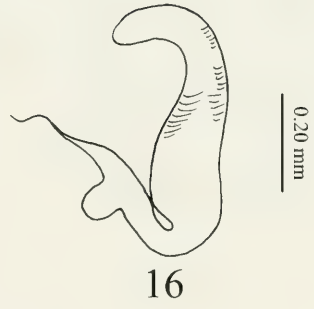
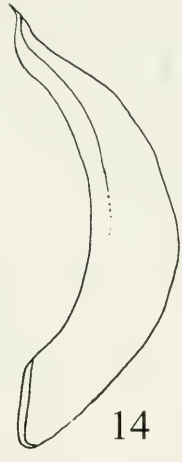
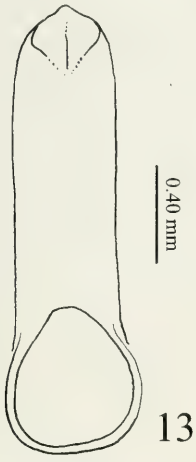
KEY TO THE CHINESE SPECIES OF *EUPHITREA*

- 1. Pronotum and elytra not unicolorous 2
- Pronotum and elytra unicolorous 13
- 2. Elytra not unicolorous 3
- Elytra unicolorous 5
- 3. Antennae extending to middle of elytra (Figs. 37–40, 82, 95, 112)
- Antennae not extending to middle of elytra, just extending beyond humerus 4
- 4. Elytra cupreous green with margin dark red; length 5.0–5.5 mm (Fig. 87, 101, 118) *E. rufomarginata* Wang
- Elytra fulvous with suture and margin black; length 2.6–3.0 mm (Figs. 68–71, 88, 102, 119) *E. suturalis* (Weise)
- 5. Punctures of elytra striate 6
- Punctures of elytra confused 8
- 6. Vertex with fine punctures; disc of pronotum smooth and almost without punctures (Fig. 111) *E. laevicollis* Wang
- Vertex without punctures; disc of pronotum with fine and close punctures 7
- 7. Pronotum piceous; basal margin of pronotum with very narrow longitudinal groove

→

Figs. 1–12. 1–4, *Euphitrea antennata*. 1, Habitus. 2, Aedeagus, ventral view. 3, Aedeagus, lateral view. 4, Aedeagus, dorsal view. 5–8, *E. burmanica*. 5, Aedeagus, ventral view. 6, Aedeagus, lateral view. 7, Aedeagus, dorsal view. 8, Spermatheca. 9–12, *E. cheni*. 9, Habitus. 10, Aedeagus, ventral view. 11, Aedeagus, lateral view. 12, Aedeagus, dorsal view.





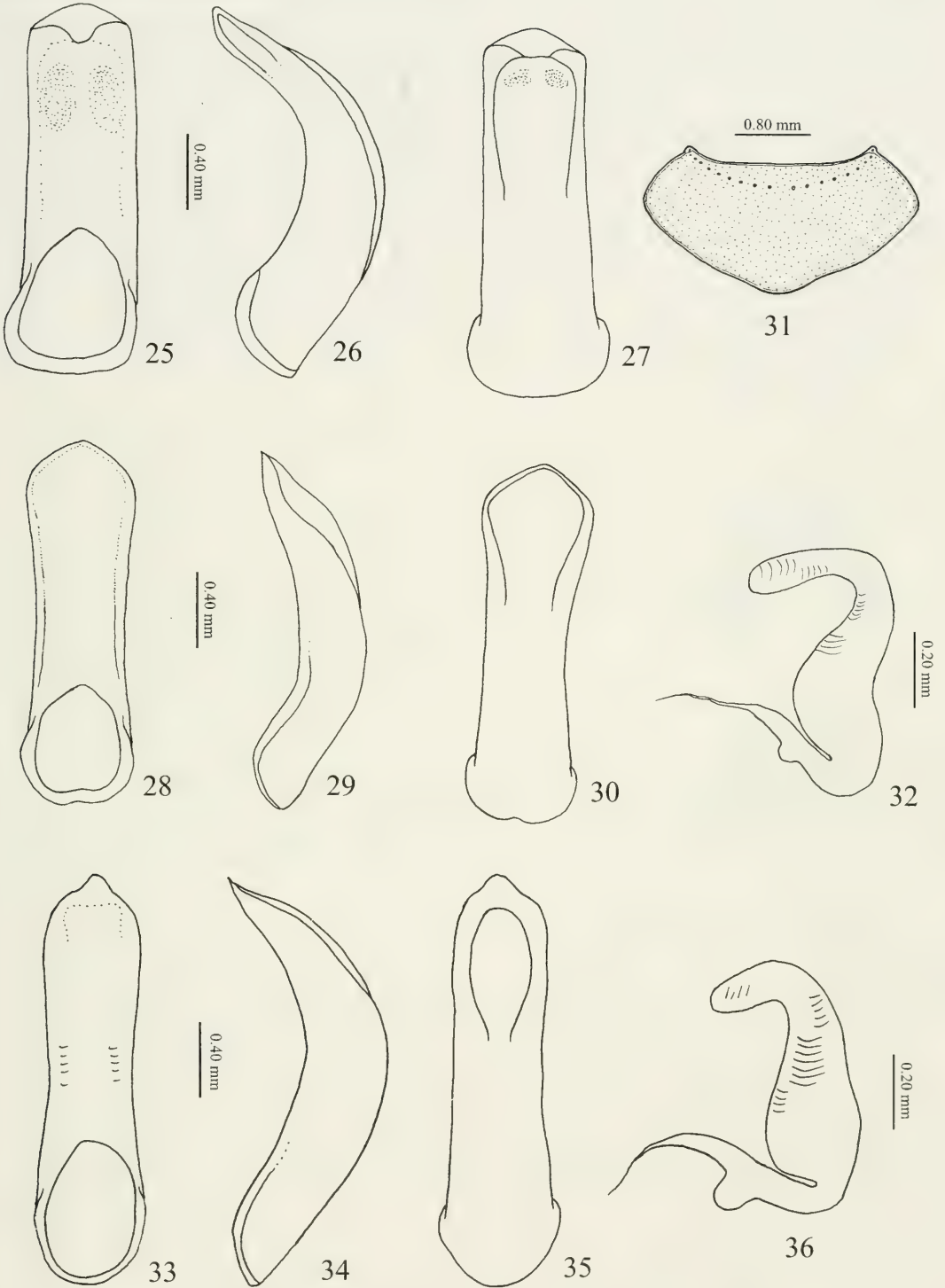
- on each side (Figs. 61–64, 86, 100, 116)
 *E. piceicollis* (Chen)
 Pronotum light orange; basal margin of
 pronotum without a short longitudinal
 groove on each side (Figs. 65–67, 117)
 *E. rufipes* Chen and Wang
8. Middle of vertex smooth, without punctures
 (Figs. 54–56, 84, 98, 115)
 *E. nistroides* (Chen)
 Middle of vertex with fine punctures 9
9. Underside of legs yellow . . . *E. flavipes* (Chen)
 Underside of legs colored otherwise, not
 yellow 10
10. Pronotum with fine, shallow punctures . . 11
 Pronotum with coarse, distinct punctures
 *E. taiwana* Kimoto
11. Elytra dark blue; length 2.2–2.6 mm
 (Figs. 9–12) *E. cheni*, n. sp.
 Elytra cupreous green; length 6.8–
 7.2 mm 12
12. Mandibles distinctly concave at base
 (Figs. 21–24, 42, 79, 93, 107)
 *E. cribripennis* Chen and Wang
 Mandibles slightly concave at base
 (Figs. 41, 43–45) *E. mandibula*, n. sp.
13. Elytra with distinct longitudinal costae
 (Figs. 33–36) . . . *E. laticostata* Chen and Wang
 Elytra without longitudinal costae 14
14. Vertex with punctures 15
 Vertex smooth, without punctures 22
15. Scutellum with punctures or wrinkles on
 surface 16
 Scutellum smooth on surface 18
16. Dorsum black, without metallic sheen . .
 *E. gressitti* (Chûjô)
 - Dorsum not black, with metallic sheen . . 17
17. Labrum with a line of strong punctures;
 length 5.5–7.0 mm (Figs. 46–49, 81, 96,
 113) *E. micans* Baly
 Labrum without transverse strong punctures;
 length 3.5–4.0 mm (Figs. 28–31)
 *E. hainana*, n. sp.
18. Antennal segment 4 equal to second and
 third combined; six basal segments of
 antennae black, apex slightly reddish
 brown, rest lighter in color (Figs. 1–4)
 *E. antennata*, n. sp.
 Antennal segment 4 not equal to second
 and third combined; antennae entirely
 reddish brown 19
19. Antennal segment 3 shorter than 4 20
 Antennal segment 3 longer than 4 21
20. Vertex strongly convex in the middle, with
 deep furrow above the eyes (Fig. 32, 110)
 *E. laboissierei* (Chen)
 - Vertex slightly convex in the middle,
 shallowly concave above the eyes (Fig. 108)
 *E. flavicornis* (Chen)
21. Elytra reddish brown (Figs. 17–20, 78, 92,
 106) *E. coomani* (Chen)
 - Elytra dark blue (Figs. 50–53, 83, 97, 114)
 *E. nigra* (Chen)
22. Elytra with punctures confused 23
 - Elytra with striate punctures 24
23. Elytra reddish brown; first sternite of
 abdomen with a black median spot
 (Figs. 72–75, 89, 103, 121)
 *E. xia* Chen and Wang
 - Elytra dark blue; first sternite of abdomen
 without black spot (Figs. 57–60, 85, 99)
 *E. omeia*, n. sp.
24. Each elytron with about twenty irregular
 striae (Figs. 13–16, 77, 91, 105)
 *E. coerulea* (Chen)
 Each elytron with eleven regular striae . . 25
25. First segment of posterior tarsus slender, as
 long as second and third combined
 (Fig. 120) *E. subregularis* Chen
 - First segment of posterior tarsus broader,
 slightly longer than second 26
26. Apex of aedeagus narrowed and truncate,
 venter with very feeble longitudinal impres-
 sion *E. chinensis* Medvedev
 - Apex of aedeagus triangular or slightly
 rounded, venter with distinct longitudinal
 groove (Figs. 5–8, 104)
 *E. burmanica* (Jacoby)

***Euphitrea antennata* Zhang and Yang,
 new species
 (Figs. 1–4)**

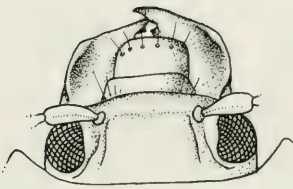
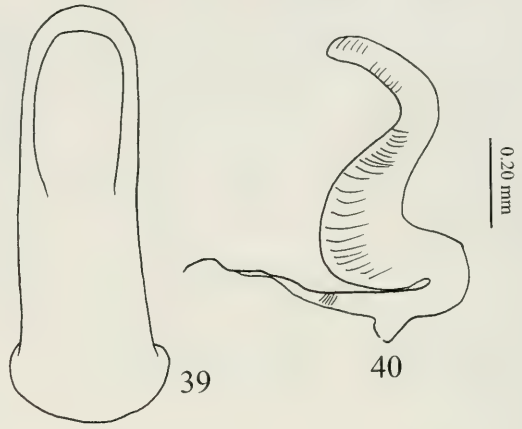
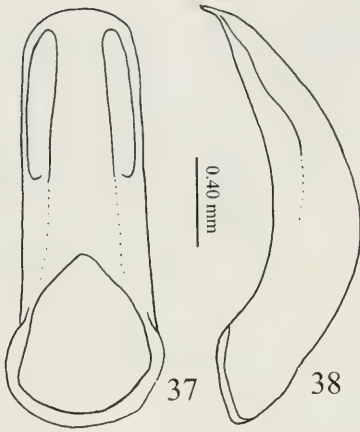
Description.—Length: 5.5–6.2 mm; width:
 4.2–5.1 mm. Body ovate, strongly con-
 vex. Head, pronotum, scutellum, elytra,
 and underside of body reddish brown;
 antenna with basal six segments black,
 apex slightly reddish brown, rest pale in
 color.

Vertex strongly convex, with sparse
 and fine punctures, with deep furrow

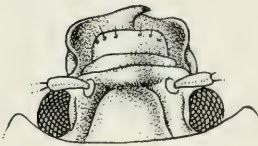
Figs. 13–24. 13–16, *Euphitrea coerulea*. 13, Aedeagus, ventral view. 14, Aedeagus, lateral view. 15, Aedeagus, dorsal view. 16, Spermatheca. 17–20, *E. coomani*. 17, Aedeagus, ventral view. 18, Aedeagus, lateral view. 19, Aedeagus, dorsal view. 20, Spermatheca. 21–24, *E. cribripennis*. 21, Aedeagus, ventral view. 22, Aedeagus, lateral view. 23, Aedeagus, dorsal view. 24, Spermatheca.



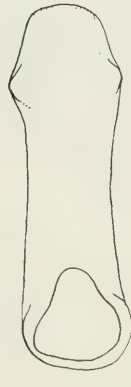
Figs. 25–36. 25–27, *Euphitrea flavipes*. 25, Aedeagus, ventral view. 26, Aedeagus, lateral view. 27, Aedeagus, dorsal view. 28–31, *E. hainana* sp. nov. 28, Aedeagus, ventral view. 29, Aedeagus, lateral view. 30, Aedeagus, dorsal view. 31, Pronotum. 32, Spermatheca of *E. laboissierei*. 33–36, *E. laticotata*. 33, Aedeagus, ventral view. 34, Aedeagus, lateral view. 35, Aedeagus, dorsal view. 36, Spermatheca.



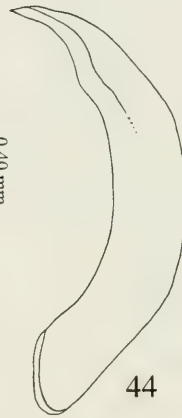
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1.25 mm



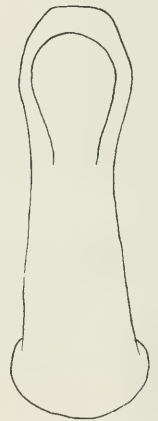
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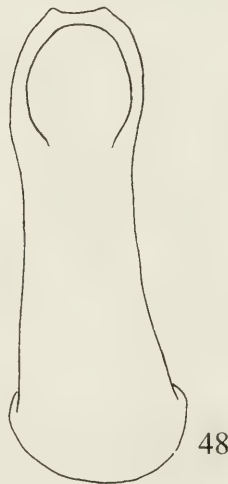
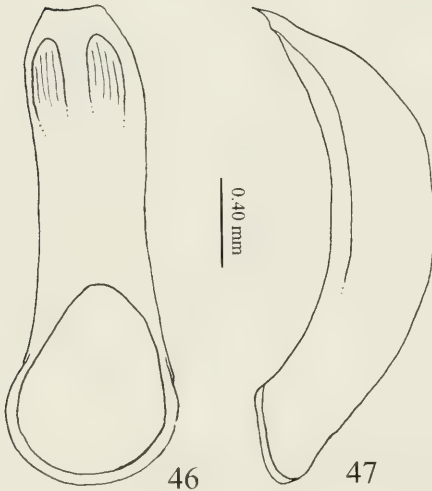
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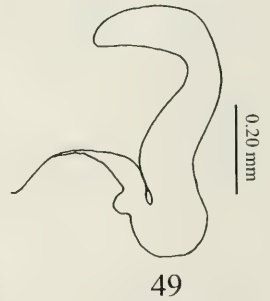
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45



48



beside eyes. Frontal ridge convex, with "Y" shaped interantennal depression. Antennal tubercles almost triangular, separated. Antenna extending to humeri of elytra, three basal segments without pubescence, others with pubescence; first segment robust, equal to eleventh, second distinctly shorter than first, third approximately equal to second, fourth equal to second and third combined, fifth to tenth equal to fourth, all segments inflated apically, apex of last segment acute. Pronotum about two times as wide as long, disc convex, with fine punctures; each side with a longitudinal impression near midlateral side; anterior margin concave, lateral margin arched, midposterior margin arched and each side with a short longitudinal furrow; anterior angle projecting, apex acute, posterior angle obtuse; each corner with a distinct setigerous pore, and marginate around pronotum. Scutellum triangular, smooth and impunctate, apex acute. Elytra distinctly broader at base than pronotum, convex, with dense punctures, more coarse and distinct than those of pronotum and with irregular arrangement; humeri convex, with sparse and fine punctures; epipleuron much more broadened, posterior part gradually narrowed, with regular transversal wrinkles on surface.

Underside with pubescence and punctures. Aedeagus with two longitudinal depressions extending about half of median lobe, apex with small denticle in median part in ventral view (Fig. 2). Apex acute in lateral view (Fig. 3). In dorsal view, with a shallow depression and a short ridge in median part (Fig. 4).

Type material.—Holotype, ♂, China, Yunnan: Yanjin, May 1934, coll. unknown (IZAS).

Etymology.—This new species is named after the color and shape of the antennae.

Remarks.—This species can be distinguished from other species of this genus by its distinct color and the shape of the antennae: basal six antennal segments black with apex slightly reddish brown and rest pale in color; first segment robust, equal to eleventh, second distinctly shorter than first, third approximately equal to second, fourth equal to second and third combined, fifth to tenth equal to fourth, all segments inflated apically with apex of last segment acute.

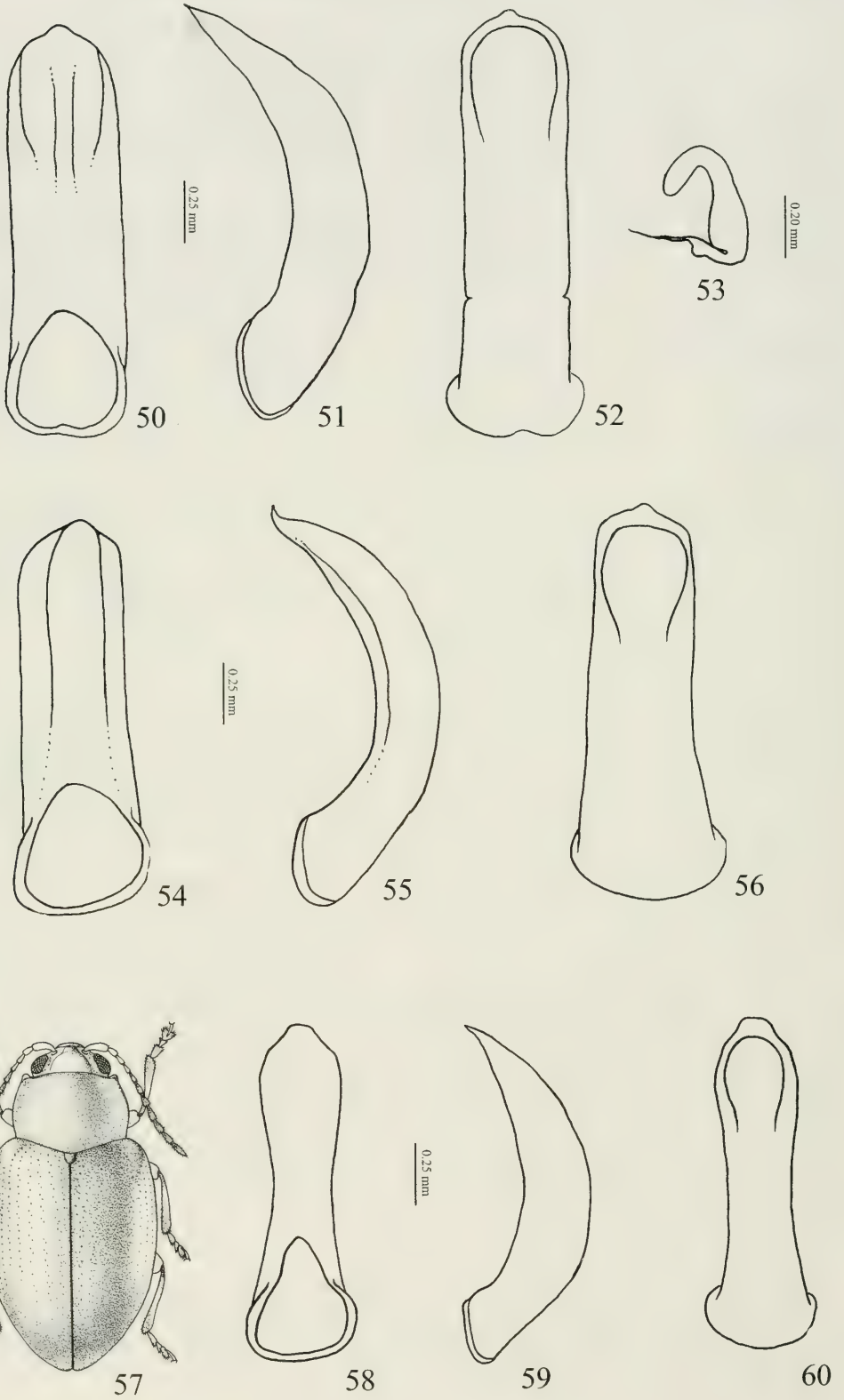
Distribution.—China: Yunnan.

***Euphitrea cheni* Zhang and Yang,
new species
(Figs. 9–12)**

Description.—Length: 2.2–2.6 mm; width: 1.3–2.5 mm. Body ovate, strongly convex. Head and pronotum reddish brown; scutellum, legs, and underside of body black, elytra metallic dark blue. Four basal antennal segments reddish brown, rest black.

Vertex strongly convex, with fine punctures and a deep groove above eyes. Clypeus slightly convex, interantennal space flat; antennal tubercles distinct, triangular. Antennae extending to $\frac{1}{3}$ of elytra, first segment thickened and longest, second distinctly shorter than first, third longer but more slender than second, fourth slightly longer than third, others equal in length to fourth, apex of last segment acute. Pronotum about 1.5

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Figs. 37–49. 37–40, *Euphitrea longicornis*. 37, Aedeagus, ventral view. 38, Aedeagus, lateral view. 39, Aedeagus, dorsal view. 40, Spermatheca. 41, Head of *E. mandibula*. 42, Head of *E. cribripennis*. 43–45, *E. mandibula*. 43, Aedeagus, ventral view. 44, Aedeagus, lateral view. 45, Aedeagus, dorsal view. 46–49, *E. micans*. 46, Aedeagus, ventral view. 47, Aedeagus, lateral view. 48, Aedeagus, dorsal view. 49, Spermatheca.



times as wide as long, disc convex, with sparse punctures; anterior margin straight, lateral margin arched, mid-posterior margin arched in middle, longitudinal furrow in each side inconspicuous; anterior lateral angle projecting, apex acute, posterior lateral angle obtuse, each corner with a distinct setigerous pore. Scutellum linguulate, with apex rounded and surface smooth and glabrous. Elytra broader at base than pronotum, with strong confused punctures; humeri distinctly convex, with sparse fine punctures on surface, with a shallow concavity before humeri. Epipleuron broad, narrowed posteriorly, with transverse wrinkles on surface.

Venter with sparse punctures and pubescence, mesosternum broad between mesocoxae. Aedeagus apically obtuse, only slightly narrowed, with double concavity in about $\frac{2}{3}$ length of median lobe in ventral view (Fig. 10). Slightly curved in lateral view (Fig. 11). Dorsally with a shallow depression in apical $\frac{1}{3}$ (Fig. 12).

Type material.—Holotype, ♂, China: Yunnan: Pingbian: Daweishan, 1,500 m, 22 June 1956, coll. Huang Keren; paratypes: 1 ♂, 2 ♀, the same data as holotype (IZAS).

Etymology.—This new species is named in honor of the late Prof. Chen Sicien.

Remarks.—This new species is similar to *E. rufipes* but can be distinguished by the color of the legs. The former has brown legs, while those of *E. rufipes* are light orange. The aedeagus of the former has a double concavity ventrally, extending about $\frac{2}{3}$ the length of the median lobe (Fig. 10), whereas the latter lacks these impressions (Fig. 65).

Distribution.—China: Yunnan.

Euphitrea gressitti (Chûjô),
new combination

Neorthea gressitti Chûjô 1965: 55.

Diagnosis.—This species is close to *E. hainana*, but it can be distinguished from it by the following characters: elytra with distinct and dense punctures, elytral punctures of the latter fine and shallow; pronotum of the latter with a transverse row of coarse punctures along the anterior margin, but *E. gressitti* without punctures. Specimens of this species were unavailable for this study.

Remarks.—This species was described as *Neorthea gressitti*. The body is rounded and the vertex is strongly convex, with a deep groove above the eyes. The genus *Neorthea* was considered a synonym of *Euphitrea* by Scherer in 1969, so this species should be transferred to *Euphitrea*.

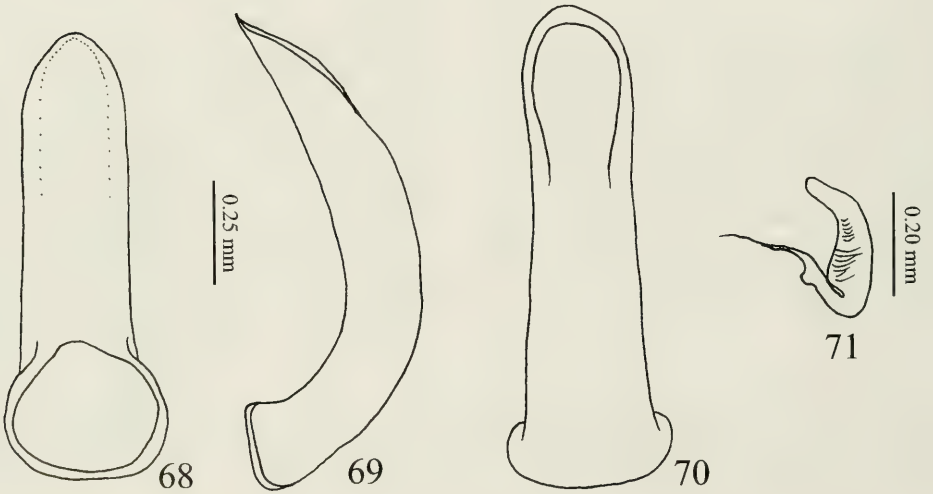
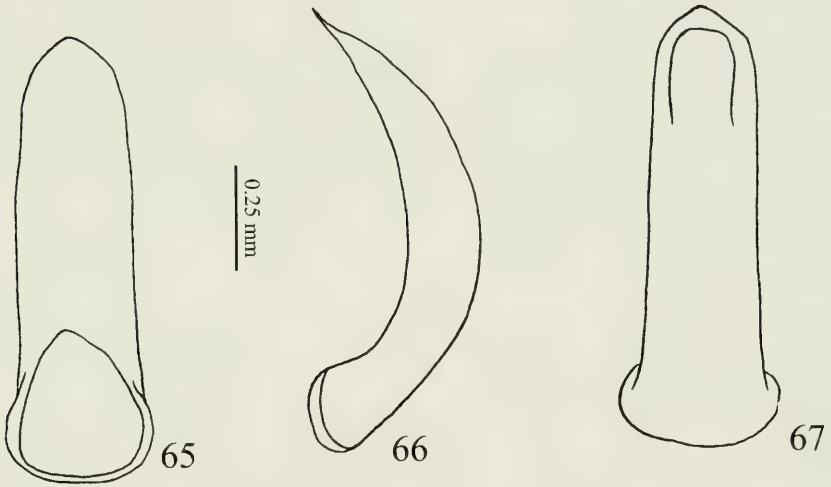
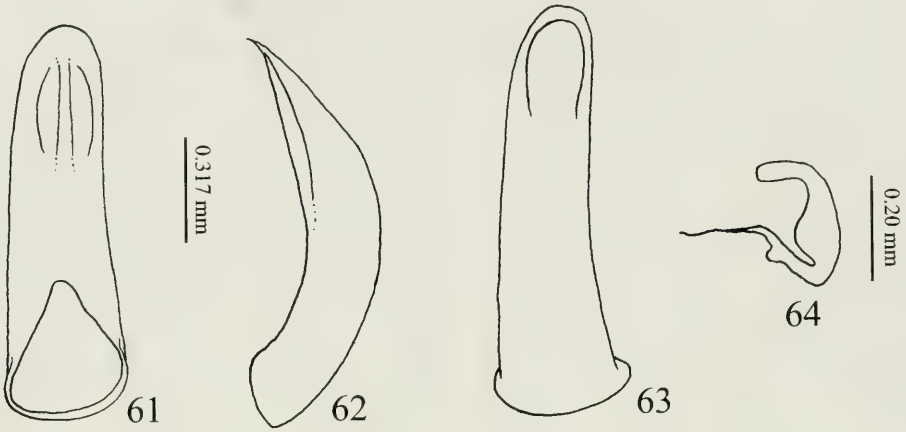
Distribution.—China: Hainan.

Euphitrea hainana Zhang and Yang,
new species

(Figs. 28–31)

Description.—Length: 4.0–4.2 mm; width: 3.8–4.0 mm. Body rounded, strongly convex. Entirely black, with feeble metallic sheen, antenna reddish brown to pale brown.

Vertex strongly convex, with sparse fine punctures on surface and a deep groove above eyes. Clypeus convex between interantennal space, distinctly delimited from vertex with a transverse impression. Antennae extending to humeri, first segment longest, club-shaped, second distinctly shorter than first, third slender and longer than second, fourth almost equal to third, others equal and



distinctly dilated apically, eleventh with apex acute. Pronotum about two times as wide as long, very convex; disc with dense, fine and shallow punctures with a transversal row of coarse punctures along anterior margin; anterior margin concave, lateral margin arched; mid-posterior margin distinctly arched toward scutellum; anterior angle slightly projected, apex acute, posterior angle obtuse; near lateral margin each with a shallow impression. Scutellum triangular, with feeble wrinkle on its surface, without punctures. Elytra distinctly broader at base than pronotum, strongly convex, with confused punctures, slightly bigger than pronotal punctures; interstices with fine punctures, near lateral margin with a longitudinal area without punctures; marginal punctures distinctly stronger than others; humeri somewhat convex with sparse and fine punctures. Epipleuron very broad, narrowed in posterior part with transverse wrinkles on surface.

Venter with sparse punctures and pubescence. Aedeagus triangular at apex, slightly narrow at middle, without any impressions in ventral view (Fig. 28), slightly curved in lateral view (Fig. 29), in dorsal view with a shallow depression apically (Fig. 30).

Etymology.—This new species is named after the type locality.

Type material.—Holotype, ♂, China: Hainan: Nada, 20 May 1954, Coll. Huang Keren; paratype, 1 ♂, the same data as holotype (IZAS).

Remarks.—This new species is close to *E. gressitti*, but from the original description of the latter we can distinguish them by the following: pronotum of the former with a transverse row of coarse punctures along anterior margin (Fig. 31), but the latter without punctures; elytral punctures of the former shallower and finer than the latter.

Distribution.—China: Hainan.

Euphitrea mandibula Wang and Zhang,
new species

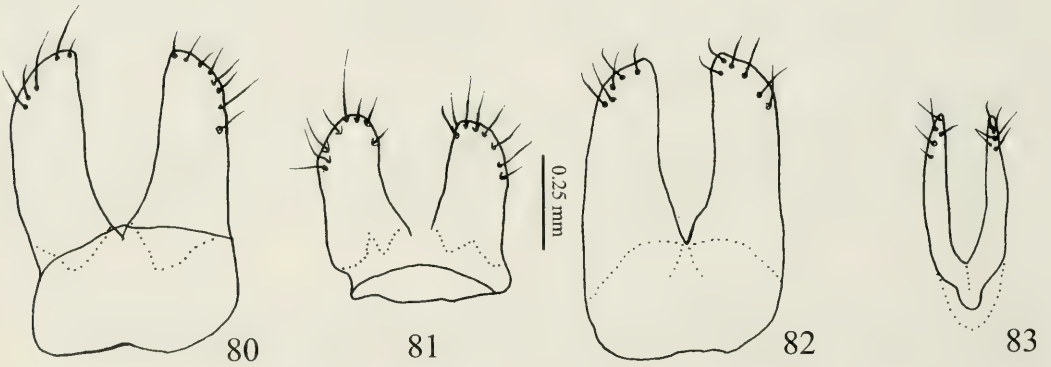
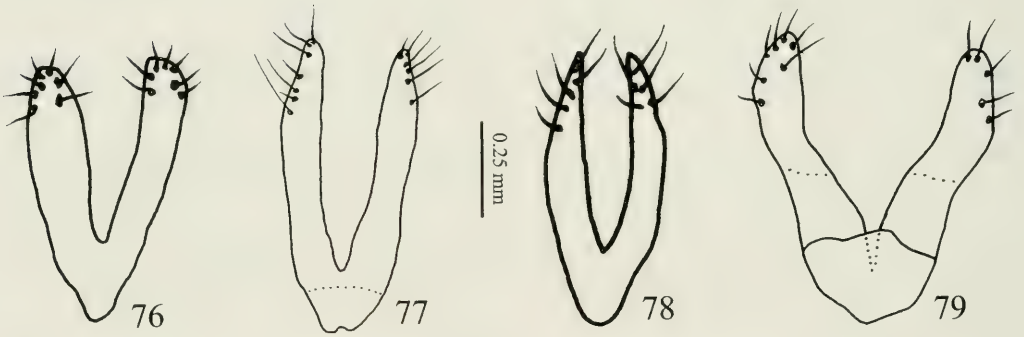
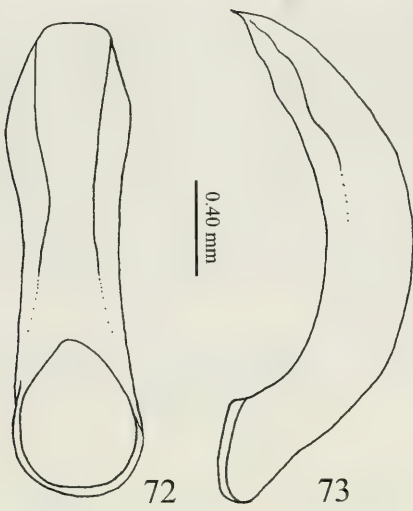
(Figs. 41, 43–45)

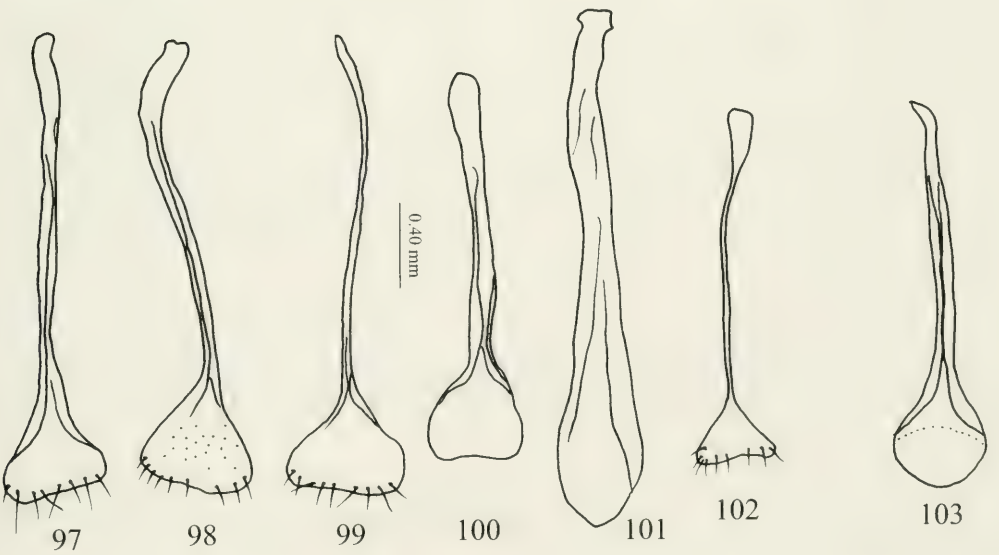
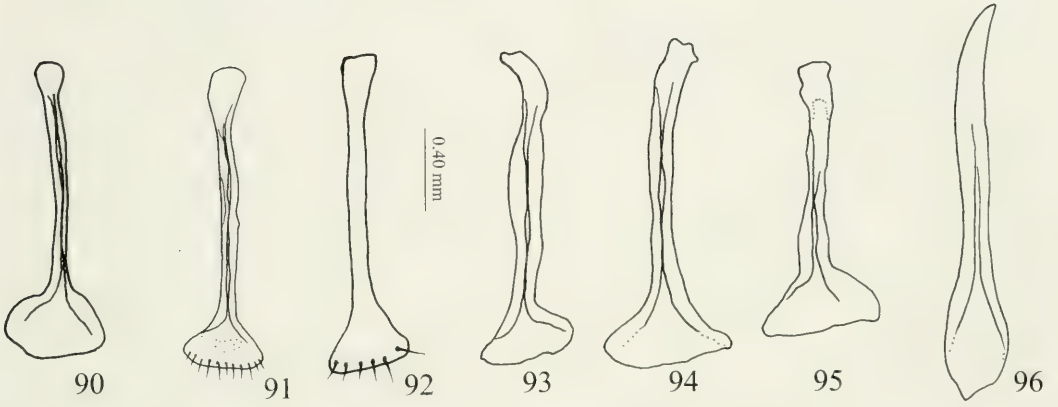
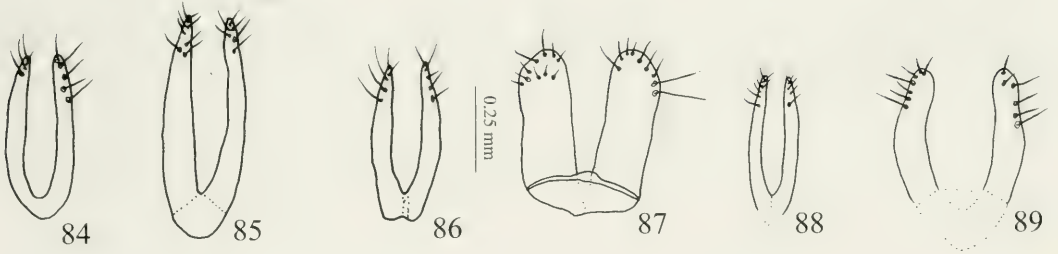
Description.—Length: 6.8–7.2 mm; width: 4.8–5.0 mm. Body ovate, dorsum convex. Head, pronotum, scutellum, antenna, legs, and underside of body brownish red, mandibles brownish red with apex black. Elytra brownish green with metallic sheen.

Vertex strongly convex, smooth with fine punctures on surface, furrow above eyes shallower than other species in the genus; clypeus convex between interantennal space and distinctly limited from vertex by transverse groove; frontal tubercles inconspicuous; labrum almost quadrate, with a transverse series setigerous pores near anterior margin and a transverse furrow before basal margin; mandibles very strong, dorsal edge distinctly convex. Antenna slightly long, extending almost to middle part of elytra, first segment longest, clubbed, second more slender than first, shortest, third longer than second, fourth slightly shorter than third, length of fifth to tenth

← Figs. 61–71. 61–64, *Euphitrea pceicollis*. 61, Aedeagus, ventral view. 62, Aedeagus, lateral view. 63, Aedeagus, dorsal view. 64, Spermatheca. 65–67, *E. rufipes*. 65, Aedeagus, ventral view. 66, Aedeagus, lateral view. 67, Aedeagus, dorsal view. 68–71, *E. suturalis*. 68, Aedeagus, ventral view. 69, Aedeagus, lateral view. 70, Aedeagus, dorsal view. 71, Spermatheca.

→ Figs. 72–83. 72–75, *Euphitrea xia*. 72, Aedeagus, ventral view. 73, Aedeagus, lateral view. 74, Aedeagus, dorsal view. 75, Spermatheca. 76–83, Vaginal palpi. 76, *E. burmanica*. 77, *E. coerulea*. 78, *E. coomani*. 79, *E. cribripennis*. 80, *E. flavipes*. 81, *E. micans*. 82, *E. longicornis*. 83, *E. nigra*.





almost equal to fourth, last longer than fourth, with apex acute. Pronotum width exceeds twice its midlength, with shallow and fine punctures evenly distributed; anterior margin sinuate, lateral margin arched, posterior margin distinctly arched in middle part, short sublateral longitudinal inconspicuous furrow on each side; laterally margined; anterior angle projecting, triangular, acute, posterior angle obtuse. Scutellum triangular, almost without punctures, with slight wrinkle on surface. Elytra broader than pronotum at base, very convex, closely and confusedly punctuate, much stronger and deeper than pronotal punctures; humerus ovate, convex, with fine punctures, short longitudinal concavity laterally; epipleuron very broad, gradually narrowed posteriorly, with regular wrinkle on surface. Underside with sparse pubescence and punctures; prosternum narrow; mesosternum broad between mesocoxae; middle part of metasternum projecting, with a longitudinal furrow; first segment of each tarsi of male inflated. Aedeagus as in Figs. 43–45.

Type material.—Holotype, ♂, Xizang: Mêdog: Baibung, 31 Oct. 1979, Coll. Jin Gentao and Wu Jianyi (IZAS).

Etymology.—This new species is named for the shape of the convex mandibles.

Remarks.—This new species resembles *E. cribripennis* from Yunnan, but it can be distinguished by the following characters: both mandibles of male very strong with dorsal edge convex, but the

mandibles of the new species are slightly concave at base (Fig. 41) and those of *E. cribripennis* are distinctly concave at base (Fig. 42); antennae of the new species more slender with length of several apical segments twice their apical width, whereas antennae of *E. cribripennis* are shorter and stronger, with the length of each segment up to 1.5 times its apical width.

Distribution.—China: Xizang.

***Euphitrea omeia* Zhang and Yang,
new species**

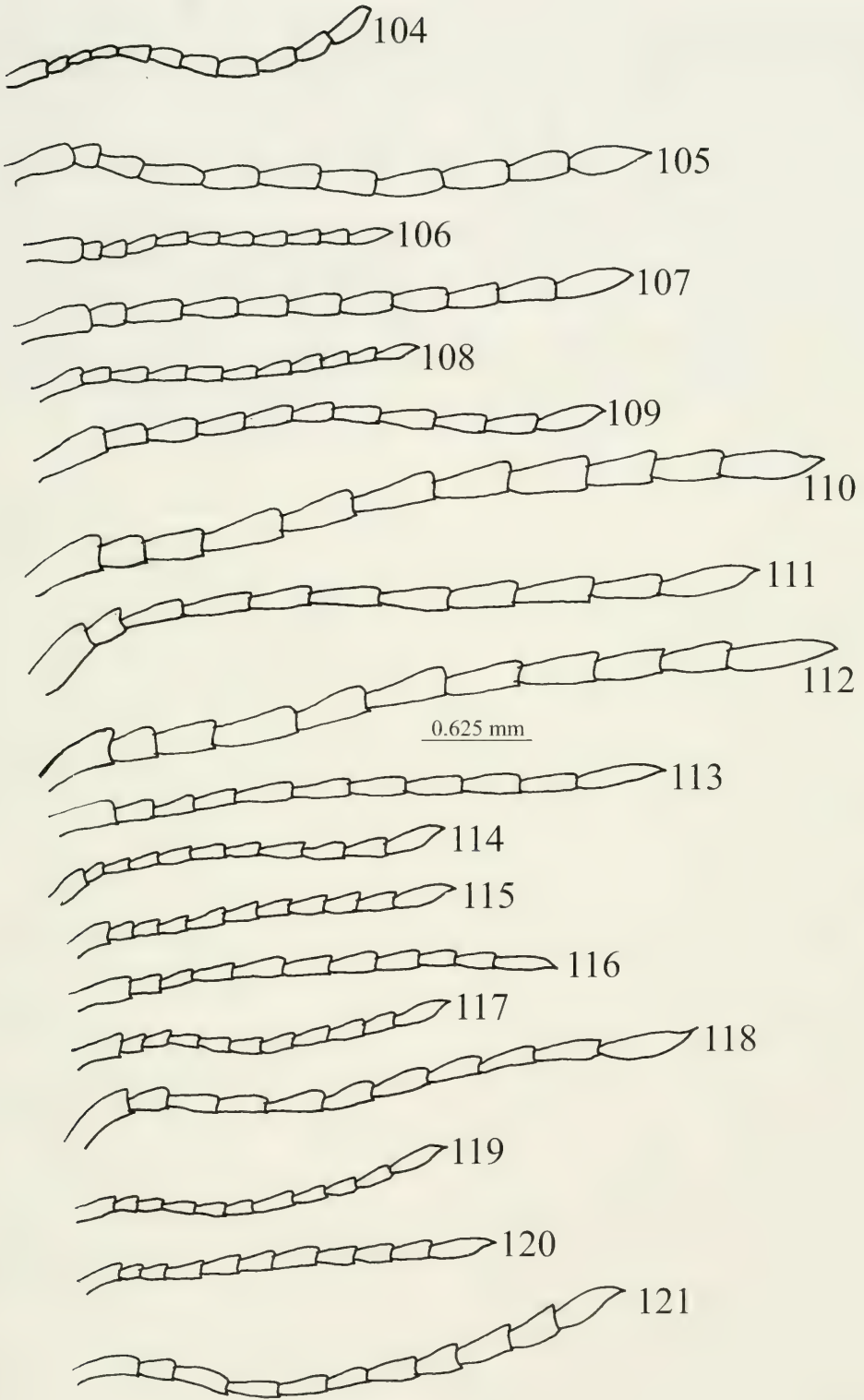
(Figs. 57–60, 85, 99)

Description.—Length: 2.4–2.6 mm; width: 1.6–1.9 mm. Body ovate, anterior and posterior part much narrower, slightly convex. Head, pronotum, elytra, and underside dark blue, elytra with metallic sheen. Four basal antennal segments brown, rest black.

Vertex strongly convex, smooth and impunctate, with a deep groove above eyes. Clypeus convex in interantennal space, nearly quadrate, distinctly limited from vertex by a transverse furrow. Antennal tubercles weak, oblique and separated. Antennae barely extending to humeri, first segment club-shaped, longest, second shorter, more slender than first, third slightly shorter than second, fourth longer than third but shorter than fifth, others equal to fifth, apex of anterior ten segments inflated, apex of last segment more acute. Pronotum distinctly longer than wide, very convex, disc with sparse, fine punctures; anterior

← Figs. 84–103. 84–89, Vaginal palpi. 84, *Euphitrea nistroides*. 85, *E. omeia*. 86, *E. piceicollis*. 87, *E. rufomarginata*. 88, *E. suturalis*. 89, *E. xia*. 90–103, Tignum. 90, *E. burmanica*. 91, *E. coerulea*. 92, *E. coomani*. 93, *E. cribripennis*. 94, *E. flavipes*. 95, *E. longicornis*. 96, *E. micans*. 97, *E. nigra*. 98, *E. nistroides*. 99, *E. omeia*. 100, *E. piceicollis*. 101, *E. rufomarginata*. 102, *E. suturalis*. 103, *E. xia*.

→ Figs. 104–121. Antennae. 104, *Euphitrea burmanica*. 105, *E. coerulea*. 106, *E. coomani*. 107, *E. cribripennis*. 108, *E. flavicornis*. 109, *E. flavipes*. 110, *E. laboissierei*. 111, *E. laevicollis*. 112, *E. longicornis*. 113, *E. micans*. 114, *E. nigra*. 115, *E. nistroides*. 116, *E. piceicollis*. 117, *E. rufipes*. 118, *E. rufomarginata*. 119, *E. suturalis*. 120, *E. subregularis*. 121, *E. xia*.



angle acute, posterior angle obtuse; anterior margin straight, lateral margin arched, posterior margin posteriorly arched in middle. Scutellum approximately triangular, surface smooth. Elytra broader at base than pronotum, punctures show tendency of striae, interstices with fine punctures; humeri ovate, convex, with a longitudinal concavity on outer surface. Epipleuron very broad, with transverse wrinkles.

Venter with sparse pubescence, coarsely distinctly punctuate. Aedeagus apex narrowed, more so in middle part in ventral view (Fig. 58), slightly curved in lateral view (Fig. 59), in dorsal view with shallow depression (Fig. 60). Vaginal palpus as in Fig. 85; tignum as in Fig. 99.

Type material.—Holotype, ♂, Sichuan: Mt. Emei: Qingyinge, 800–1000 m, 5 May 1957, Coll. Wang Zongyuan (IZAS). Paratypes: 79 ♂, 77 ♀. Hunan: Dayong: Zhushitou, 400 m, 3 ♂, 6 ♀, 19 Aug. 1988, Coll. Wang Shuyong; Sangzhi: Tianpingshan, 700–1,450 m, 15 ♂, 11 ♀, 14 Aug. 1988, Coll. Wang Shuyong; Yongshun: Shanmuhelinchang, 600–820 m, 16 ♂, 18 ♀, 9 Aug. 1988, Coll. Wang Shuyong; Guzhang: Gaowangjie, 900 m, 1 ♂, 5 ♀, 30 July 1988, Coll. Wang Shuyong. Sichuan: Mt. Emei: Qingyinge, 800–1,000 m, 3 ♂, 2 ♀, 5 May 1957, Coll. Wang Zongyuan; 2 ♂, 20 Apr. 1957, Coll. Wang Zongyuan; 4 ♂, 1 ♀, 17 Apr. 1957, Coll. Lu Youcai; 1,800–2,100 m, 9 ♂, 11 ♀, 24 June 1955, Coll. Zi Yunzhen; 8 ♂, 4 ♀, 24 June 1955, Coll. Ou Bingrong; 4 ♂, 6 ♀, 24 June 1955, Coll. Yang Xingchi; Jiulaodong, 1,800–1,900 m, 5 ♂, 8 ♀, 23 Aug. 1957, Coll. Lu Youcai; 7 ♂, 4 ♀, 17 Aug. 1957, Coll. Wang Zongyuan; Xixiangchi, 1,800–2,000 m, 2 ♂, 3 ♀, 7 Aug. 1957, Coll. Huang Keren (all in IZAS).

Etyymology.—This new species is named after the type locality.

Remarks.—*Ephitrea omeia* is allied to *E. burmanica*, but it differs in the shape

of the aedeagus: the former with a narrower apex and very narrow in middle (Fig. 58), *E. burmanica* with the apex of aedeagus truncate and broader than the former.

Distribution.—China: Hunan, Sichuan.

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